

**AMENDMENTS TO THE CLAIMS**

1.-35. (Cancelled)

36. (Previously presented) A method of generating stem cells suitable for transplantation, the method comprising:

- (a) collecting stem cells;
- (b) exposing said stem cells to hepatocyte growth factor (HGF) or an active portion thereof alone; and
- (c) isolating stem cells having CXCR4 levels above a predetermined threshold, to thereby generate stem cells suitable for transplantation.

37. (Original) The method of claim 36, wherein collecting said stem cells is effected by:

- (i) a stem cell mobilization procedure; and/or
- (ii) a surgical procedure.

38.-39. (Canceled)

40. (Original) The method of claim 36, wherein said stem cells are hematopoietic stem cells.

41. (Original) The method of claim 40, wherein said hematopoietic stem cells are CD34<sup>+</sup> hematopoietic stem cells.

42. (Original) The method of claim 41, wherein said hematopoietic stem cells are CD34<sup>+</sup>/CD38<sup>-low</sup> hematopoietic stem cells.

43. (Original) The method of claim 36, wherein said stem cells are mesenchymal stem cells.

44. (Original) The method of claim 36, wherein said exposing said stem cells to said HGF or said active portion thereof, is effected by:

- (i) expressing a polynucleotide encoding said HGF or an active portion thereof in said stem cells; and/or
- (ii) contacting said stem cells with said HGF or an active portion thereof.

45. (Original) The method of claim 36, wherein said isolating stem cells having CXCR4 levels above said predetermined threshold is effected by FACS.

46. (Original) The method of claim 45, further comprising determining homing capabilities of said stem cells having CXCR4 levels above said predetermined threshold following step (c).

47.-75. (Canceled)